THREE BIG A'S IN SURGERY

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mann. He discovered the remedial value of mercury, and was the first to point out the connection between cretinism in the offspring and goiter in the parents—thus hinting at one of the recently discovered functions of the thyroid. And he may have had a splendid premonition of asepsis; for he treated wounds with strict regard for cleanliness.

He may have been an arrant braggart: his favorite admonition was to the effect that "If you really wish to learn, listen to what I say, attend to what I write." Perhaps Browning overestimates him; but undoubtedly he was a great genius.

Then came Vesalius, the "Father of Anatomy." He believed that the first study of mankind was man; but he was hard put to find material for that study, owing to the ecclesiastical ban upon dissection. For, though those gentlemen were adept murderers, they had powerful prejudices against the examination of human bodies for scientific purposes.

So Vesalius was forced to depend for material upon the unfortunates who hung in chains at almost every crossroad. In the dead of night he stole those bodies, took them to his room, and worked upon them—in imminent danger that the strong arm of the Inquisition, like the tentacles of a devilfish, might reach, even from the dim shadows of his closely curtained room, entwine him in its hideous grasp, and consign him to the horror of the torture. However, he determined the structure of the heart, and came within a hair's breadth of anticipating the illustrious Harvey in demonstrating the circulation of the blood. He found out so much about the body that was never before even suspected, that he required a large sized book to tell it all in.

But Vesalius was finally taken "red handed," accused of "impiety," and sentenced to death by the Inquisition. Philip II., however, intervened for him, and his sentence was commuted to a pilgrimage to the Holy Land. And the story goes that even the elements protested against permitting such a wretch to live; for the winds blew a hurricane, the sea thundered in mountainous waves over the vessel in which he had taken passage, and Vesalius the Anatomist expiated his temerity in daring the displeasure of his persecutors.

FROM earliest Egyptian times the accepted method of treating wounds consisted of pouring boiling oil over the surface, and smearing them with pitch. And so it happened that on the evening of a particularly sanguinary day, when Francis I. and his gallant army of French plunderers were invading Turin, the wounded were so numerous that the supply of boiling oil gave out.

Ambroise Paré, a young French surgeon on his first campaign, was in despair. But perhaps "necessity is the mother of prevention." At any rate, he tied the bleeding vessels and bound the wounds as best as he could with clean bandages. Long before daybreak he was with his patients, expecting to find them in a horrible condition, perhaps dead, from gangrene. What was his astonishment to find that those whom he had treated with the boiling oil were in agony, while those whom he had merely bandaged were comparatively comfortable. Exeunt boiling oil.

Shortly afterward Paré developed the use of the ligature in tying off blood vessels, substituting this for the old method of searing the stump with a redhot iron. The first man on whom he tried it was so delighted with the results that he swore a great oath, the only printable part of which was that he had got rid of his leg on very good terms.

A perfect glutton for work, Paré described all the medical and surgical conditions then known, developed the technic of scores of operations, and elaborated improvements in obstetrical practice. And his childlike boast that "The ancients have naught wherein to excel us, and posterity will not be able to surpass us, save by some additions to things already discovered," was a bold prophecy. For over two hundred and fifty years it was true! Paré had written "Finis" under the World Chapter on Surgery. All that the surgeon could do to mend the body he had done.

Then, in the first half of the nineteenth century, the marvel of "The Blessed Sleep" came winging its way out of the unknown, and Anesthesia, the second of the Three Big A's, was born. The chapter closed by Paré was reverently turned down, and humanity fared to new miracles and still more marvelous wonders.

Following Paré, great names dot the slowly unrolling pages of history, plentiful as the currants in a Christmas cake, each worker bringing to the general fund some crumb of learning, some new fact garnered from the plentiful tables of Opportunity and Application. It has been a glorious history, rich with the priceless fruits of toil and sacrifice and loving service for humanity.

We now see wherein we have reason to pay tribute to the white-robed Priest of Health who officiates at the operating table, that noblest altar ever erected to mankind, and to the indefatigable worker in hospital, laboratory, clinic, and dissecting room, who have made of the miraculous the commonplace.

DAVID

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the greatest treasures on earth. And I'm a goin' to tell you some other things asides that."

After it had got so dark that they couldn't make out the hills below 'em they left the top and went down to the little hangout, whar they had some supper; and a' hour later they went to sleep.

ELWOOD didn't offer to tell David about them thar things until mighty nigh the middle of the day. David had waited as patient as Job, because he knowed Elwood would tell him when he wanted him to know about it.

Elwood set down on his blanket when he decided that the time had come to tell my son. David he set down on his bed of boughs, which was clost to Elwood's. Then Elwood begun:

"The reason I'm a follerin' my present occupation," says he, "is not for pay. I don't need no money. I chose my present occupation because that's danger in it, and for no other reason. I come out here, David, to git killed.

"Yes, I come out here to git killed. But why, you want to know, did I come away out here for that? Couldn't I a shot myself, and thereby accomplished the fool purpose? Well, no, friend David," he says, "I couldn't do that. Now, I'm not jest exactly crazy; but I admit I could well be all o' that. The serpent that nested so long at my heart fanged all the joy out o' my life, and filled it with bitterness, and that bitterness, friend David, was the bitterness of torment. David, I was picked out by the thing called Fate to die by inches, unmanned, to perish away a minute at a time, to lie in a bed and see myself go to a shadder as gradual as the drippin' of water wears a stone, helpless, a beggar at the door of death. And—oh, my friend, I didn't want to die like that! I brooded over the thought so much, and hated it so much, that I decided that I would go like a man, with the feel of a redhot rifle in my hands, and with boots on my feet. By God! I think I loved to live better than anybody on earth, David! And, my friend, the reason I loved life so much was this—"

He stopped, all a chokin' up and plumb mad at hisself because the tears jest would come a tricklin' down his tanned cheeks, and begun to fumble like a blind man at his breast pocket. Then he drawed out the picture of a woman, a young woman with a lot o' black hair coiled around her head, and with the eyes of a' angel, which was a seemin' to look straight into the middle of yore eyes, and with the lips of a' angel too, which was jest barely parted in a little sweet and tender smile.

"That's my Irene," Elwood says, sort o' getherin' hisself together. "David, when I seen that I was marked to die with a flat chest and sunk cheeks, I thought it would hurt her less, and be better for her, if I broke our engagement and made her mad at me and then disappeared. So I wrote her a letter and axed her to be freed—and she wrote back and said I was free. And she was that proud and hurt that she put it a bit stingin'. But thar was a little splash on the letter, David, that give it all away, a little place whar the ink was all blurred. David, the Almighty never made anything sweeter'n that one woman!"

And my son, pore, tenderhearted David, wanted to say somethin' and didn't know what to say.

"Look at this, David," Elwood goes on,